

19990429.ba v02_n524.bam.990429 v02_n525.bam.990429

>From ???@??? Thu Apr 29 09:15:15 1999
Message-Id: <199904290831.DAA09587@sco.theporch.com>
Date: Thu, 29 Apr 1999 03:31:24 CDT
From: Old Tube Radios <boatanchors@theporch.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: BOATANCHORS digest 2524

BOATANCHORS Digest 2524

Topics covered in this issue include:

- 1) Re: Who's the JOAK on ?
by David Stinson <arc5@ix.netcom.com>
- 2) Re: HF Sites in Colombia
by David Stinson <arc5@ix.netcom.com>
- 3) Re: HF Sites in Colombia
by Dave Jordan <wa3gin@erols.com>
- 4) Re: HF Sites in Colombia
by john <johnmb@mindspring.com>
- 5) Re: Who's the JOAK on ?
by "Roberta J. Barmore" <rbarmore@indy.net>
- 6) Re: HF Sites in Colombia
by Bob Roehrig <broehrig@admin.aurora.edu>
- 7) EV655
by Dave Jordan <wa3gin@erols.com>
- 8) Heath V-7A
by thompson@mindspring.com
- 9) Receiver alignment with sweep generators
by wallace@world.std.com (Andy Wallace)
- 10) Re: HF Sites in Colombia & elsewhere
by "Tom R. Rice" <tomrice@netcom.com>
- 11) hum on STRONG signals?
by wallace@world.std.com (Andy Wallace)
- 12) Re: EV 655
by Ralph Parker <rparker@istar.ca>
- 13) Re: EV 655
by Dave Jordan <wa3gin@erols.com>
- 14) Technical Radio LRR-6
by Dennis Gehrke <DLG1@micron.net>
- 15) mail format
by "Roger A. McCarty" <rmccarty@earthlink.net>
- 16) Simpson 261 fuse?
by n6nae@ix.netcom.com (Richard Humphrey)
- 17) vintage test equipment anyone?
by Brian.Harris@sv.sc.philips.com (Brian Harris)
- 18) FS: Johnson Viking Challenger

- by "Edwin G. Buttell" <edd.b@snet.net>
- 19) FS: Viking 500 & SSB Adapter
by "Edwin G. Buttell" <edd.b@snet.net>
- 20) FS: Johnson Viking Ranger
by "Edwin G. Buttell" <edd.b@snet.net>
- 21) RE: mail format
by "Roger A. McCarty" <rmccarty@earthlink.net>
- 22) Re: Can't tame EX107's RFA
by Hue Miller <kargokult@proaxis.com>
- 23) Re: HF Sites in Colombia
by John Kolb <jlkolb@cts.com>
- 24) Re:Receiver Alignment
by Hue Miller <kargokult@proaxis.com>
- 25) Items FS
by BEN NOCK <G4BXD@compuserve.com>
- 26) Mk 123 spy sets cases available
by BEN NOCK <G4BXD@compuserve.com>
- 27) Valves wanted
by BEN NOCK <G4BXD@compuserve.com>

Message-ID: <37278BAE.2FF01FAD@ix.netcom.com>
Date: Wed, 28 Apr 1999 17:29:02 -0500
From: David Stinson <arc5@ix.netcom.com>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Who's the JOAK on ?
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

I have a 1944 guide to shortwave radio. It lists several Japanese shortwave stations, all of which have three-letter callsigns or three letters plus a number, which designated a second or third frequency or remote transmitter location for the same station. JOAK is not listed.

The Japanese were probably following the old convention of 3-letter calls for external service radio stations and four-letter callsigns for domestic service.

It would not be unusual for a radio program to be transcribed or produced and distributed live at a domestic station; it may be that JOAK was simply the closest studio. Guess you'd have to find someone who was there to find out for sure.

GL OM DE Dave Stinson AB5S
arc5@ix.netcom.com

Message-ID: <3727924C.906FB0E7@ix.netcom.com>
Date: Wed, 28 Apr 1999 17:57:16 -0500
From: David Stinson <arc5@ix.netcom.com>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: HF Sites in Colombia
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Uncle Sam keeps a very close watch on the satellite traffic in and out of CoCalombia, but he can't have DF trucks on the ground to pinpoint individual transmitters in the large cities. The CoCalombia government isn't going to DF them because an impoverished nation can't be expected to take serious action against a major contributor to their GNP. Those peasants in the countryside gotta eat, too. They can't feed them all from coffee sales.

So HF is the smart way to both stay in touch with production facilities deep in the jungle and with distribution aircraft and ships traveling to and from the U.S. Simple and reliable systems-- we could take a lesson.

How is this connected to Boatanchors?-
South America is becoming a serious drain on many parts needed to build hi-power Boatanchor-style amplifiers. Many later-model exciters are going south, too. It's still hard to build a 5-10KW rig with surface-mount chips, and even harder to get it fixed. Simple, BA-style rigs are the way to go. I've already met two people at hamfest and auctions who buy for the South Americans. Surprised? And you thought only the Japanese did that ;-). So think about squirrelrelling-away parts while you can.

73 OM DE Dave Stinson AB5S
arc5@ix.netcom.com

Message-ID: <37279B8E.99CD459@erols.com>
Date: Wed, 28 Apr 1999 19:36:46 -0400
From: Dave Jordan <wa3gin@erols.com>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
CC: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: HF Sites in Colombia

Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Perhaps in the past HF was used...most serious drug lords have their own

PCS encrypted networks...the gov does monitor HF in most points of interest around the world as well as egress/access phone traffic using massive computer systems fed by the major long distance companies.

Last time I noticed the Canadians were hording amplifier parts and tubes

like nobody's business....what could they be up to?

Have Fun,
dave

=====

David Stinson wrote:

> Uncle Sam keeps a very close watch...

Message-Id: <3.0.3.32.19990428193726.00c6739c@mindspring.com>

Date: Wed, 28 Apr 1999 19:37:26 -0400

To: Old Tube Radios <boatanchors@theporch.com>

From: john <johnmb@mindspring.com>

Subject: Re: HF Sites in Colombia

Cc: Old Tube Radios <boatanchors@theporch.com>

Mime-Version: 1.0

Content-Type: text/plain; charset="us-ascii"

At 07:36 PM 4/28/99 -0400, Dave Jordan wrote:

>Last time I noticed the Canadians were hording amplifier parts and tubes

>

>like nobody's business....what could they be up to?

....about 1KW on 75m, I'd guess!

: -)

/John

Date: Wed, 28 Apr 1999 19:03:43 -0500 (EST)

From: "Roberta J. Barmore" <rbarmore@indy.net>

To: Old Tube Radios <boatanchors@theporch.com>

cc: Old Tube Radios <boatanchors@theporch.com>

Subject: Re: Who's the JOAK on ?

Message-ID: <Pine.SUN.3.96.990428190236.18462A-100000@indy1>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Hi!

The last I heard, the real-life "Tokoyo Rose" ran some kind of small store not too far from Wrigley Field in Chicago. Why not ask *her* about the mic?

73,
--Bobbi

KB9GKX "RJ" rbarmore@indy.net Roberta J. (Bobbi) Barmore
FISTS #3388 * G-QRP #10001 * ARRL * RSGB * WIA
Appreciator Of Vacuum-Tube Ham Gear and Vintage Keys

Date: Wed, 28 Apr 1999 19:22:37 -0500 (CDT)
From: Bob Roehrig <broehrig@admin.aurora.edu>
To: Old Tube Radios <boatanchors@theporch.com>
cc: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: HF Sites in Colombia
Message-ID: <Pine.ULT.3.96.990428192142.14423B-100000@admin.aurora.edu>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

On Wed, 28 Apr 1999, David Stinson wrote:

> Those peasants in the countryside gotta eat, too.
> They can't feed them all from coffee sales.

Oh, I dunno ---- don't all us BAers practically live on coffee :-)?

"Nostalgia is a thing of the past"
E-mail: broehrig@admin.aurora.edu or k9eui@arrl.net 73 de Bob, K9EUI
CIS: Data / Telecom Aurora University, Aurora, IL
630-844-4898 Fax 630-844-4222

Message-ID: <3727A7AD.D5B9A23E@erols.com>
Date: Wed, 28 Apr 1999 20:28:29 -0400
From: Dave Jordan <wa3gin@erols.com>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
Subject: EV655

Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Got the info on the MIC...thanks

From: thompson@mindspring.com
Message-ID: <007501be91d8\$db7b31c0\$f60a45cf@default>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Heath V-7A
Date: Wed, 28 Apr 1999 20:40:18 -0400

I recently acquired a Heath V-7-A VTVM and the meter cover is broken in the left corner. I know about the hammarlund clock covers but wonder if anyone has a source for this meter cover. The meter works OK.

Dave K4JRB

From: wallace@world.std.com (Andy Wallace)
To: Old Tube Radios <boatanchors@theporch.com>
Cc: Old Tube Radios <boatanchors@theporch.com>
Subject: Receiver alignment with sweep generators
Date: Thu, 29 Apr 1999 00:53:54 GMT
Message-Id: <372ead4b.17638907@world.std.com>
Mime-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

With all this great sweep talk going on, and with hamfest season beginning, can someone recommend an affordable sweep gen which will cover BA IFs
Currently my only gen is a URM-25 which seems fine for most other things.

--Andy
wallace@world.std.com

From: "Tom R. Rice" <tomrice@netcom.com>
Message-Id: <199904290059.RAA23381@netcom15.netcom.com>
Subject: Re: HF Sites in Colombia & elsewhere
To: Old Tube Radios <boatanchors@theporch.com>
Date: Wed, 28 Apr 1999 17:59:40 -0700 (PDT)
MIME-Version: 1.0
Content-Type: text/plain; charset=US-ASCII
Content-Transfer-Encoding: 7bit

> I've already met two people at hamfest
> and auctions who buy for the South Americans.

Back about 1983 or so, I was working for Atari
and we had a plant in Ireland in those days. One
of their people came over to Sunnyvale for temp duty
and, knowing I was a ham, asked me the best places
to buy 2-meter handi-talkies. Turned out he was
buying them for the IRA, sub rosa, as it were!

73 de WB6BYH

--

"Start off every day with a smile and get it over with." --W.C.Fields
Tom R. Rice
tomrice@netcom.com

From: wallace@world.std.com (Andy Wallace)
To: Old Tube Radios <boatanchors@theporch.com>
Subject: hum on STRONG signals?
Date: Thu, 29 Apr 1999 00:58:38 GMT
Message-Id: <372fadbf.17753954@world.std.com>
Mime-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Hi, folks. A local friend of mine picked up a receiver last weekend and
though the seller claimed he "recapped it," the set hums -- but not in the
normal way I'd suspect. It hums only on strong, local stations! I have not
put a scope to it (and may not get a chance to for some time).

I've never had/fixed a set with this symptom so I'd like to hear where to
look. Bad bias causing the AGC on a strong station putting the detector
into the wrong knee of the curve?

--Andy
wallace@world.std.com

Message-Id: <3.0.5.32.19990428184042.007dd560@istar.ca>
Date: Wed, 28 Apr 1999 18:40:42 -0700
To: Old Tube Radios <boatanchors@theporch.com>
From: Ralph Parker <rparker@istar.ca>
Subject: Re: EV 655
Mime-Version: 1.0

Content-Type: text/plain; charset="us-ascii"

Dave, WA3GIN asked:

>Does anyone have info on the Electrovoice 655 microphone? A friend is
>sending me one and I have no idea if I can use it...

Hi Dave: I rember using the EV-655 when I worked as audio op in 1958.
About 10" long, about 7/8" in diameter, type UA connector. Probably 50/150
ohms impedance. Quite flat freq response, 50-10,000. We used them as
handheld mic for sports type announcers (before the 635A), and I've used
them on a drum kit.

Might be a little bassy for ham use - don't get too close to it, maybe 4"
or so.

Omnidirectional pattern.

I wish I had one in my collection.

73, Ralph, VE7XF

ps: hoarding amplifier parts 'cause I can't decide what to build for 6m :-)

Message-ID: <3727BEBF.7F476207@erols.com>
Date: Wed, 28 Apr 1999 22:06:55 -0400
From: Dave Jordan <wa3gin@erols.com>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
CC: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: EV 655
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Thanks Ralph,

I'm thinking of using it or a Shure 55S on an old collins S-line I'm restoring.

thanks for the insiders view,
dave

=====

Ralph Parker wrote: Hi Dave: I rember using the EV-655 when I worked as audio
op in 1958....

Message-ID: <3727C217.8D74F78A@micron.net>
Date: Wed, 28 Apr 1999 20:21:11 -0600
From: Dennis Gehrke <DLG1@micron.net>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>

Subject: Technical Radio LRR-6
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

I have a Technical Radio LRR-6 in my collection, and don't know much about it. It is a very nice unit in excellent condition. Can someone tell me more about this radio??

73's

Dennis gehrke
KC7VXD

From: "Roger A. McCarty" <rmccarty@earthlink.net>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: mail format
Date: Thu, 29 Apr 1999 03:01:26 -0000
Message-ID: <000201be91ec\$91f64da0\$0100000a@accurate-main>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Please excuse this off topic post, albeit prompted by the list administrators and motivated by my sincere desire to resolve the problem.

I am being told that my posts are in html format. My mailer is set for plain text. I would appreciate receiving direct replies from list members to verify html or plain text format.

Thank You and 73

Roger A. McCarty ARS KD6CC So. Calif.
<http://www.qsl.net/kd6cc>
<http://www.qsl.net/kr6lp>
Qrp-L #1555 KR6LP #1

Date: Wed, 28 Apr 1999 22:03:15 -0500 (CDT)
Message-Id: <199904290303.WAA05041@dfw-ix2.ix.netcom.com>
From: n6nae@ix.netcom.com (Richard Humphrey)
Subject: Simpson 261 fuse?
To: Old Tube Radios <boatanchors@theporch.com>

Anybody know what's the right fuse for a Simpson 261, Series 2?

I have a book for the Series 5 which calls for a 1 amp, 3AG fuse. My swap meet Series 2 meter came with a 1/2 amp 313-3AG, the type with the black globar resistor inside.

The resistance of this 1/2 amp fuse is high enough that I can't get the ohmmeter to zero on the Rx1 range. IR drop across the fuse is about 220 mV, while a new 1 amp type only drops 20 mV. If you look at the circuit, the extra 200 mV drop is enough to cause problems. It fakes a very weak D-cell quite nicely! I've checked all the resistor values, and they are just fine. The problem is this darn fuse.

Thanks in advance,
Richard

Mime-Version: 1.0
Date: Wed, 28 Apr 1999 22:35:21 -0700
Message-ID: <00317F72.1914@svlima.sv.sc.philips.com>
From: Brian.Harris@sv.sc.philips.com (Brian Harris)
Subject: vintage test equipment anyone?
To: Old Tube Radios <boatanchors@theporch.com>
Content-Type: text/plain; charset=US-ASCII
Content-Transfer-Encoding: 7bit
Content-Description: cc:Mail note part

In the further continuation of my cleanup and purge around here an interesting VOM begs to be taken. This Triumph (Chicago, IL) Model 333S is in fine condition and needs but batteries and test leads to make it play again. It really belongs with a test equipment collector as I think it's never been used.

If you're interested, please let me know. The price? \$10 plus shipping (7 pounds or so). By the way, three others will follow but they are all VTVM's by Heath, Paco and RCA.

73, Brian

Message-ID: <3727FE23.46D1@snet.net>
Date: Wed, 28 Apr 1999 23:37:23 -0700
From: "Edwin G. Buttell" <edd.b@snet.net>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
Subject: FS: Johnson Viking Challenger
Content-Type: text/plain; charset=us-ascii; name="CHALL.TXT"
Content-Transfer-Encoding: 7bit
Content-Disposition: inline; filename="CHALL.TXT"

For Sale;

Johnson Viking Challenger. This one needs a little help !!!

It's about a 6 or 7 on the 10 scale. No dents or dings,
powers-up, no smoke, good meter, has tubes, no book.

Price \$35.00

NO SHIPPING !!!

Pick-up or meet me at Horsetraders ("Deerchester")

e-mail edd.b@snet.net

73's de Edd.B.

W1AFA Storrs, Ct.

Boatanchor radios warm up the shack.

Message-ID: <37280420.7F31@snet.net>
Date: Thu, 29 Apr 1999 00:02:56 -0700
From: "Edwin G. Buttell" <edd.b@snet.net>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
Subject: FS: Viking 500 & SSB Adapter
Content-Type: text/plain; charset=us-ascii; name="500.TXT"
Content-Transfer-Encoding: 7bit

Content-Disposition: inline; filename="500.TXT"

11:47PM 4/28/99

For Sale;

As a package only.

- (1) Johnson Viking 500, quite clean, a few scratches top of case, front panel is very clean. Full output 400+ watts very stable & accurate VFO. New HV choke, New LV transformer, New LV choke, UTC-300 watt mod transformer, New HV transformer, SS power supply 2300 volts @ 500+ma. Audio has been opened up, negative feedback circuit, step-start HV circuit, three diode mod circuit, HV choke spike suppresser circuit, New 811-A's and 33 MFD @ 3000 Volts in PS. Power supply/modulator cover is intact, no dents, no holes.
- (2) Johnson Viking SSB adapter with power supply. Front panel matches the 500 panel, however the case is the wrong color. (flat black) Three new 7360's, two new VR-150's, Collins 9mc filter, audio has been opened up, negative feedback circuit added, good meter, 3+ watts output.
- (3) Printer table (steel) with all components neatly installed, and wired, PS/Mod deck sits on floor under the table.
- (4) Manuals; Viking 500 original.
Viking 500 copy.
Viking SSB copy.
- (5) Extras; Two 811-A's (used good)
Two 7360's (new)

Price \$1100.00 FIRM !!! NO SHIPPING !!! PICK UP ONLY !!!

e-mail edd.b@snet.net

73's de Edd.B.

W1AFA Storrs, Ct.

Boatanchor radios warm up the shack.

Message-ID: <372804E3.175A@snet.net>

Date: Thu, 29 Apr 1999 00:06:11 -0700

From: "Edwin G. Buttell" <edd.b@snet.net>

MIME-Version: 1.0

To: Old Tube Radios <boatanchors@theporch.com>

Subject: FS: Johnson Viking Ranger

Content-Type: text/plain; charset=us-ascii; name="RANGER.TXT"

Content-Transfer-Encoding: 7bit

Content-Disposition: inline; filename="RANGER.TXT"

11:56PM 4/28/99

For Sale;

E.F.Johnson Viking Ranger, very, very clean, almost "mint" condition, factory wired, unmodified-totally stock condition. 55 to 60 watts output on all bands, except 40 watts on 10M. It has the normal "yellow" audio and modulates 100%. The transmitter is from a S.K. estate. No Manual.

Price \$275.00 NO SHIPPING !!!!!
Pick-up or meet within 50/75 miles of my QTH.
Or meet me at Horsetraders. ("Deerchester")

e-mail edd.b@snet.net
73's de Edd.B.
W1AFA Storrs, Ct.
Boatanchor radios warm up the shack.

From: "Roger A. McCarty" <rmccarty@earthlink.net>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: RE: mail format
Date: Thu, 29 Apr 1999 04:20:18 -0000
Message-ID: <000b01be91f7\$96cfc120\$01000000a@accurate-main>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Thank you very much, to all that have responded. It appears my posts are indeed in plain text format. No other replies are necessary.

Thank you again,

Roger KD6CC

Message-Id: <3.0.5.32.19990428230321.007c9100@proaxis.com>
Date: Wed, 28 Apr 1999 23:03:21 -0700
To: Old Tube Radios <boatanchors@theporch.com>
From: Hue Miller <kargokult@proaxis.com>
Subject: Re: Can't tame EX107's RFA
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

At 10:19 AM 4/28/99 -0400, Marty's Refl. Drop wrote:

>

>Have that Halli/Echophone rattling again but can't tame it's 6SG7 RF
>amp stage on higher SW bands.*

>

>It oscillates like crazy when brought thru input & output resonance via
>alignment trimmers.

--now, the bias voltages for the tube are in the ballpark?

if it was mine, with this problem, i would stay with the 6SK7.

there were not many designs with xSG7 tubes in the rf, and i

believe those were only (?) sets with 6 meters and/or FM
band coverage.

the cathode bias is up where it belongs. the screen bias is a
little conservative?

does removing the cathode bypass capacitor help at all?

the tuning capacitor bearings are making good contact, right?

no scratching as you tune, or squirrelyness in spots on the
low band?

>WB4MNF suggested that since this thing was nearly a one-off that it

>may be a notorious design defect.

> Marty

--some sets do come off the conveyer belt with factory fresh design
flaws, that's an unfortunate fact. so you may have to do some redesign.

>*ODD BUT CUTE(?) DESIGN IDEA IN SET

>

> RFA plate is not switched to primaries of each input coil - instead
> all primaries seriesed fm BC where B+ applied thru highest freq. where
> plate lead emerges.

--here's something i would try: "flip" the primaries in the RF plate
circuit of the bands that oscillate. invert them, hoping the phase
reversal will be correct to no longer provide positive feedback
to the grid.

hue ka7lxy

Date: Wed, 28 Apr 1999 23:17:11 -0700 (PDT)

From: John Kolb <jlkolb@cts.com>

To: Old Tube Radios <boatanchors@theporch.com>

cc: Old Tube Radios <boatanchors@theporch.com>

Subject: Re: HF Sites in Colombia

Message-ID: <Pine.SC0.4.05.9904282312360.8565-1000000@sd.cts.com>

MIME-Version: 1.0

Content-Type: TEXT/PLAIN; charset=US-ASCII

On Wed, 28 Apr 1999, David Stinson wrote:

> Uncle Sam keeps a very close watch on the satellite traffic in and
> out of CoCalombia, but he can't have DF trucks on the ground
> to pinpoint individual transmitters in the large cities.
> The CoCalombia government isn't going to DF them because
> an impoverished nation can't be expected to take serious action
> against a major contributor to their GNP.
> Those peasants in the countryside gotta eat, too.

A Motorola cell phone expert was the speaker at our local ham club tonight, and said that most DFing for FCC, Coast Guard, etc, was now done by time of arrival at satellites - the control station would command the several satellites in the desired area to tune in to the desired freq, and send the data down to the gnd. Only takes a second to pinpoint the transmitting location.

John

Message-Id: <3.0.5.32.19990429001114.007bed50@proaxis.com>
Date: Thu, 29 Apr 1999 00:11:14 -0700
To: Old Tube Radios <boatanchors@theporch.com>
From: Hue Miller <kargokult@proaxis.com>
Subject: Re:Receiver Alignment
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

>> say, i'm recalling a BC-348 article in CQ or 73, where the author
>> had tightened the passband by removing DC plate current from the
>> IF transformers.
>
>Yes it may well have happened. But I suggest that the reason was feed back
>which developed because of interstage coupling between the chokes. That
could
>cause regeneration which would "tighten the passband ". If you want to
tighten the bandpass with a
>smidgeon of regeneration then a little capacitance between the grid and
plate
>of either or both of the IF tubes would do the job.
>
>
Frank

--that's an interesting idea, but i don't think that was it. in this

situation, the selectivity would vary with the IF gain control setting, and the author, i feel, would have noticed or commented on this when he graphed the response curves.

--also, in scrutinizing the BC-348 manual, i see the last IF can is overcoupled. i don't see the necessity for that, altho it served some purpose for the receiver's original role. my thinking, not yet realized (natch...) is to lessen the coupling here, either by a single shorted turn of wire around the coil core, between the windings; or to remove one of the pies off the 3-pie winding, then add capacitance to retune.

hue ka7lxy

Date: Thu, 29 Apr 1999 04:29:19 -0400
From: BEN NOCK <G4BXD@compuserve.com>
Subject: Items FS
To: Old Tube Radios <boatanchors@theporch.com>
Message-ID: <199904290429_MC2-73D3-B5C2@compuserve.com>
MIME-Version: 1.0
Content-Transfer-Encoding: quoted-printable
Content-Type: text/plain; charset=ISO-8859-1
Content-Disposition: inline

Heathkit RA-1 ham bands rx, working... 35.00
POED Reciver No 12, 30-100MHz, working... 25.00
A43 tx/rx, no acc's..... 40.00
Avo All Wave Signal Generator, 95KHz-80MHz... 25.00
Oscilloscope, miniature, 2"..... 20.00
Airband Tx/Rx, xtal controlled, valved, mains powered..... 25.00
BE-201 tx/rx with dc psu..... 80.00
BE-201 tx/rx for spares/rebuild..... 40.00
RAF WWII J switch, used with T1154.....35.00
80 Mtr amp, 5 in, 50 out, valved, inc psu... 35.00
Mk 123 spy set canvas cases..... 18.00

all prices in Sterling, plus postage if required.
or swap for other mil bits.

Ben G4BXD.

Date: Thu, 29 Apr 1999 04:29:16 -0400
From: BEN NOCK <G4BXD@compuserve.com>
Subject: Mk 123 spy sets cases available
To: Old Tube Radios <boatanchors@theporch.com>
Message-ID: <199904290429_MC2-73D3-B5BF@compuserve.com>
MIME-Version: 1.0

Content-Transfer-Encoding: quoted-printable
Content-Type: text/plain; charset=ISO-8859-1
Content-Disposition: inline

I have several green canvas cases that house the 123 spy set, =
these are about 11.5 by 8.5 by 3.5 inch (W, D, H) with two =
fastening straps and buckles. =

These would suit other similar equipment.

very good condition. 18 Pound each plus postage. =

Ben G4BXD

Date: Thu, 29 Apr 1999 04:29:29 -0400
From: BEN NOCK <G4BXD@compuserve.com>
Subject: Valves wanted
To: Old Tube Radios <boatanchors@theporch.com>
Message-ID: <199904290429_MC2-73D3-B5CE@compuserve.com>
MIME-Version: 1.0
Content-Transfer-Encoding: quoted-printable
Content-Type: text/plain; charset=ISO-8859-1
Content-Disposition: inline

I am in need of at least two valves, type:

PE1/75 =

Any offers or suggestions for obtaining such would be most
welcome. =

thanks, Ben G4BXD.

End of BOATANCHORS Digest 2524

>From ???@??? Fri Apr 30 06:50:12 1999
Message-Id: <199904300251.VAA15307@sco.theporch.com>

Date: Thu, 29 Apr 1999 21:50:57 CDT
From: Old Tube Radios <boatanchors@theporch.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: BOATANCHORS digest 2525

BOATANCHORS Digest 2525

Topics covered in this issue include:

- 1) RE: Can't tame EX107's RFA
by "David Newkirk" <dpnewkirk@home.com>
- 2) ? grid emission question ?
by Phil Mills <plmills@ibm.net>
- 3) Re: ? grid emission question ?
by John Shriver <jas@shiva.com>
- 4) Re: Receiver alignment with sweep generators
by "A. B. Bonds" <ab@vuse.vanderbilt.edu>
- 5) Re: hum on STRONG signals?
by "A. B. Bonds" <ab@vuse.vanderbilt.edu>
- 6) OTA From MRCG
by Dick Dillman <ddillman@igc.apc.org>
- 7) Viking II CD
by W4UOC@aol.com
- 8) DAYTON Hamvention
by "William L. Fuqua III" <wlfuqu00@pop.uky.edu>
- 9) R-265/GRD Direction Finding Receiver
by Roy Morgan <roy.morgan@nist.gov>
- 10) Re: Can't tame EX107's RFA
by "Steve" <scb@loki.internettport.net>
- 11) NC303 Calibrator Knob
by Matt Jodziewicz <mattj@oraus.com>
- 12) Bits FS
by BEN NOCK <G4BXD@compuserve.com>
- 13) Remember teletype?
by Norm Flasch <flasch@cushy.ece.nwu.edu>
- 14) GRC-9 Production Data
by "Richard Brunner" <rbrunner@gis.net>
- 15) Re: Remember teletype?
by John M Iverson <jackiv@juno.com>
- 16) Tunable Hum
by "Richard Brunner" <rbrunner@gis.net>
- 17) RE: hum on STRONG signals?
by "David Newkirk" <dpnewkirk@home.com>
- 18) Re: Remember teletype?
by W4UOC@aol.com
- 19) Re: mail format
by "Arden Allen" <gumbear@pacbell.net>
- 20) [Fwd: Remember teletype?]

by Morris Odell <morriso@vifp.monash.edu.au>
21) RE: hum on STRONG signals?
by Tom Norris <badger@telalink.net>
22) Hallicrafters "logo" needed
by "Sandy Blaize" <ebjr@worldnet.att.net>

From: "David Newkirk" <dpnewkirk@home.com>
To: Old Tube Radios <boatanchors@theporch.com>
Cc: "'BoatAnchors'" <boatanchors@sco.theporch.com>
Subject: RE: Can't tame EX107's RFA
Date: Thu, 29 Apr 1999 07:13:27 -0400
Message-ID: <000001be9231\$4e22aa20\$11670518@cc328679-a.vron1.nj.home.com>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Hue wrote:

[snip]

> --now, the bias voltages for the tube are in the ballpark?
> if it was mine, with this problem, i would stay with the 6SK7.
> there were not many designs with xSG7 tubes in the rf, and i
> *believe* those were only (?) sets with 6 meters and/or FM
> band coverage.

[snip]

Note also, in this remote case that this may play a role, that the 6SG7 and 6SK7 have subtly different pinouts: In the 6SK7, pin 3 is G3, pin 5 is K, and pin 1 is the shield; in the 6SG7, pin 3 is K, pin 5 is K, and pin 1 is shield + G3. If the set is wired for a 6SK7 with G3 grounded, merely plugging in a 6SG7 will result in a stage with no cathode bias. Another possibility that could affect stability with either tube is that the connection from pin 1 to ground is open.

73,

Dave Newkirk, W9VES
dpnewkirk@home.com

Message-ID: <3728510E.D43C7EDE@ibm.net>
Date: Thu, 29 Apr 1999 07:31:10 -0500
From: Phil Mills <plmills@ibm.net>
MIME-Version: 1.0

To: Old Tube Radios <boatanchors@theporch.com>
Subject: ? grid emission question ?
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

I have seen mention of grid emission several times in the last few weeks. Also, there is an 813 in a box of old tubes that I acquired that is marked on the base in ink "has grid emission".

Can someone please tell me:

Exactly what is meant by "grid emission"?
What causes it?
How does one detect that a tube has this condition?
What effect does grid emission have on tubes in RF service?

thanks & 73,
Phil
AB5TH

Date: Thu, 29 Apr 1999 09:52:12 -0400
Message-Id: <199904291352.JAA00272@brill.shiva.com>
From: John Shriver <jas@shiva.com>
To: Old Tube Radios <boatanchors@theporch.com>
CC: boatanchors@theporch.com
Subject: Re: ? grid emission question ?

Normally in a tube, the cathode is hot and emits electrons, which travel to the plate, depending on how they are inhibited by the grid. (This is defined as a current flowing from the plate to the grid, because someone made the wrong guess on the polarity of the current carrier a few hundred years ago. The joys of conventional current flow.)

Grid emission happens when the grid gets warm enough to emit some electrons. It can happen simply because the cathode gets the grid hot enough to do so. (Poor tube design or manufacture or excessive filament voltage.) Or, it can happen because some event in the tube causes some of the cathode emissive material to condense on the grid, causing it to be more emissive at it's normal operating temperature. (Very easy to do in a Nuvistor, drive the grid positive once, and it's shot.) Also, gas in a tube will cause the grid to be more likely to emit electrons. (Probably the most common cause.)

Grid emission is also known as negative grid current. Why negative? Well, remember my note on the issues of conventional current flow. The electrons are flowing into the grid pin. That means that

conventional current is flowing out of the grid pin, so by convention that is negative grid current.

So why is grid emission bad? Well, the negative grid current will cause a voltage to be setup across the feed resistance of the grid circuit. Say, across the 0.5 meg resistor to C- bias. The direction of that current is such that the grid voltage is increased.

Unfortunately, increasing the grid voltage will increase the current through the tube, and the dissipation in the tube. That will make the grid hotter. The grid will emit more electrons, further increasing the grid voltage.

Thermal runaway. Red plate, something gives. Ker-snap.

The TV-7(*)/U gas test is based on measuring grid emission. The GAS button increases the source resistance on the grid bias, if the meter moves more than 10%, the tube is gassy.

Tubes with grid emission problems can be used in select equipment. The basic requirement is that the impedance between the bias voltage and the tube grid be LOW.

For instance, the Heathkit W-6M audio amplifier uses 6550 output tubes. That tube is generically prone to failing by getting gassy, and having grid emission cause runaway. Well, the W-6M is one of the few amps using the 6550 that directly coupled the output tubes to the cathodes of a cathode follower (a 6CG7). So, it can use 6550 tubes with their getters turned almost entirely white, tubes that would not run in any other 6550 amp. (A valuable amp, saw one for sale for \$400 recently, and DEFINITELY a boatanchor. Much bigger than it looks in the old ads. Each transformer is a 6" cube!)

Message-Id: <3.0.1.32.19990429085345.00ae6860@vuse.vanderbilt.edu>

Date: Thu, 29 Apr 1999 08:53:45 -0500

To: Old Tube Radios <boatanchors@theporch.com>

From: "A. B. Bonds" <ab@vuse.vanderbilt.edu>

Subject: Re: Receiver alignment with sweep generators

Mime-Version: 1.0

Content-Type: text/plain; charset="us-ascii"

At 12:53 AM 4/29/99 GMT, you wrote:

>With all this great sweep talk going on, and with hamfest season beginning,
>can someone recommend an affordable sweep gen which will cover BA IFs
>Currently my only gen is a URM-25 which seems fine for most other things.
>

The most common sweepers are from Eico (360?? maybe), Hickok (288X) and

Precision (E-400). The problems with these is that the Eico and Precision are made for TV and FM work only, and they won't sweep at, say, 455 kHz. You'd have to sweep the antenna input signal. The good side of these units is that the sweep is generated mechanically (loudspeaker voice coil assembly) so you can vary the sweep rate away from the 60 Hz standard if you have an external generator to drive the speaker. The 288X is the Swiss Army Knife of signal generators. It makes the sweep by reactance tube modulation and frequency beating. If you can figure out how it works, it's pretty neat, and it will sweep at 455 kHz. However, I haven't explored varying the sweep rate on these, dunno if it is easily done.

A. B. Bonds

Message-Id: <3.0.1.32.19990429090001.00ae6440@vuse.vanderbilt.edu>
Date: Thu, 29 Apr 1999 09:00:01 -0500
To: Old Tube Radios <boatanchors@theporch.com>
From: "A. B. Bonds" <ab@vuse.vanderbilt.edu>
Subject: Re: hum on STRONG signals?
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

At 12:58 AM 4/29/99 GMT, you wrote:

>Hi, folks. A local friend of mine picked up a receiver last weekend and
>though the seller claimed he "recapped it," the set hums -- but not in the
>normal way I'd suspect. It hums only on strong, local stations! I have not
>put a scope to it (and may not get a chance to for some time).

AaaaHAH! CARRIER HUM!! I've tried to talk about this before, but there was not much response. Yes, it is most obvious on strong stations when the AGC is working pretty hard, and yes, it only appears on some sets. In any event, it's a common problem (Can you say "Hallicrafters?")

>

>I've never had/fixed a set with this symptom so I'd like to hear where to
>look. Bad bias causing the AGC on a strong station putting the detector
>into the wrong knee of the curve?

>

I'm thinking the AGC source (detector) might be banging into loading problems when the line is forced too far in one direction, but I've been chasing this for some months without joy. Any takers?

73 A. B. ("Why does it hum? 'Cuz it don't know the words!!") Bonds

Date: Thu, 29 Apr 1999 07:15:26 -0700 (PDT)
Message-Id: <2.2.16.19990429070335.45574adc@pop.igc.org>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

To: Old Tube Radios <boatanchors@theporch.com>
From: Dick Dillman <ddillman@igc.apc.org>
Subject: OTA From MRCG

As soon as I finish breakfast I'll saddle up and head down to San Louis Obispo, CA for the Military Radio Collectors Group meet. I'll be on the air with an AN/GRC-9 and AN/GRC-109 on 7040Kc CW and with a RT-68 on 51.5Mc FM and would enjoy working any list members within range.

73,

Dick

Dick Dillman
<ddillman@igc.apc.org>
WPE2VT W6AWO
Collector Of Heavy Metal:
Harleys, Willys and Radios Over 100lbs.

From: W4UOC@aol.com
Message-ID: <225066b0.2459c8df@aol.com>
Date: Thu, 29 Apr 1999 10:38:23 EDT
Subject: Viking II CD
To: Old Tube Radios <boatanchors@theporch.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
Content-Transfer-Encoding: 7bit

I have recently received a Viking II CD (Civil Defense Version) that works and looks good, however, the audio seems rather restricted. I have noted in the Moore book that there is a form of audio compression incorporated in this variation of the Viking II.

I have ordered a manual that will probably describe the audio changes, etc.

I may reconfigure the audio to eliminate the compression if it is so designed.

If you have any experience with this version of the Viking II I would be interested in your thoughts. I will wait for the schematic before progressing much more on this project. (If anyone can scan the audio section of the VK-II CD schematic it might speed up my investigation of this situation) It also appears there is a compression gain control with at test point. Do you know what it is supposed to read? It may be as simple that the compression/limiter is not adjusted correctly.

Signal and audio reports indicate that the audio, as it is, is quite

restricted and sounds more like a ricebox sounding AM. I sure don't want that!

I have refurbished several other standard Viking IIs but this is obviously a different animal.

Tom Koch - W4UOC
8170 Habersham Waters Road
Dunwoody, GA 30350
w4uoc@aol.com
FAX (770) 730-8137

Date: Thu, 29 Apr 1999 13:13:08 -0400 (EDT)
Message-Id: <199904291713.NAA28086@pop.uky.edu>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
To: Old Tube Radios <boatanchors@theporch.com>
From: "William L. Fuqua III" <wlfuqu00@pop.uky.edu>
Subject: DAYTON Hamvention

Does someone have a list of BA folks and
fleamarket spaces for Dayton yet?

73

Bill wa4lav

William L. Fuqua III P.E. E-mail WLFUQU00@POP.UKY.EDU Phone (606) 257-4155
Department of Physics and Astronomy CP-177 Chem. Phys. Bldg.
University of Kentucky , Lexington, Ky 40506-0055

Message-Id: <4.1.19990429131902.00a58d10@sdct-sunsv1.ncsl.nist.gov>
Date: Thu, 29 Apr 1999 13:21:07 -0400
To: Old Tube Radios <boatanchors@theporch.com>
From: Roy Morgan <roy.morgan@nist.gov>
Subject: R-265/GRD Direction Finding Receiver
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Anchorites,

I have an R-265/GRD receiver:

- Rack mount in two parts, receiver and power supply
- Power supply ran two receivers
- Motor tuned to multiple channels (10 I think)

- Balanced antenna input
- HF: one continuous band only.
- Miniature tubes

This was apparently a dedicated direction finding receiver. The R-390 Military Specification mentions that the R-390 was intended to replace "special use" receivers. It would seem that this was one of them..

Any info or experience out there? The bottom chassis covers have the schematics, but that's all I have.

-- Roy Morgan
 100 Bureau Drive, Stop 8970
 National Institute of Standards and Technology
 Gaithersburg MD 20899-8970
 301-975-3254 Fax: 301-948-6213 roy.morgan@nist.gov --

 Message-Id: <199904291758.MAA22206@loki.internettport.net>
 From: "Steve" <scb@loki.internettport.net>
 To: Old Tube Radios <boatanchors@theporch.com>
 Date: Thu, 29 Apr 1999 12:37:12 +0000
 MIME-Version: 1.0
 Content-type: text/plain; charset=US-ASCII
 Content-transfer-encoding: 7BIT
 Subject: Re: Can't tame EX107's RFA
 CC: "Old Tube Radios" <boatanchors@theporch.com>

Greetings;

Some time ago(Sept/Oct,'98) , Hank van Cleef recommended putting either a 47[^] or 470[^] resistor in the grid &/or the plate line of the offending stage(s). Can't remember specifics offhand, wish I had filed the original message.

Try it if nothing else suggested fixes it.

Regards; Steve

 Message-ID: <30AB00986E91D211A08B00104B8942F00934D3@ORAMAIL>
 From: Matt Jodziewicz <mattj@oraus.com>
 To: Old Tube Radios <boatanchors@theporch.com>
 Subject: NC303 Calibrator Knob
 Date: Thu, 29 Apr 1999 10:46:37 -0700
 MIME-Version: 1.0

Content-Type: multipart/alternative;
boundary="-----=_NextPart_001_01BE9268.3F46A150"

This message is in MIME format. Since your mail reader does not understand this format, some or all of this message may not be legible.

-----=_NextPart_001_01BE9268.3F46A150
Content-Type: text/plain;
charset="iso-8859-1"

Does anybody have a spare NC300/303 calibrator knob they are willing to part with? I need one for the unit I am working on as the pliers look funny hanging from the shaft in front.

Also a big thank you to all who responded to my question about a 4H4 substitute. It is a 6V6 for all who still don't know and it works beautifully once I removed the SS kludge a the previous owner built under the chassis.

Knob anybody....anybody....

-----=_NextPart_001_01BE9268.3F46A150
Content-Type: text/html;
charset="iso-8859-1"

<!DOCTYPE HTML PUBLIC "-//W3C//DTD W3 HTML//EN">
<HTML>
<HEAD>
<META HTTP-EQUIV="Content-Type" CONTENT="text/html; charset=iso-8859-1">

<META content=' "MSHTML 4.72.2106.6" ' name=GENERATOR>
</HEAD>
<BODY bgColor=#ffffff>
<DIV>Does anybody have a spare NC300/303 calibrator knob they are willing to part with? I need one for the unit I am working on as the pliers look funny hanging from the shaft in front.</DIV>
<DIV> </DIV>
<DIV>Also a big thank you to all who responded to my question about a 4H4 substitute. It is a 6V6 for all who still don't know and it works beautifully once I removed the SS kludge a the previous owner built under the chassis.</DIV>
<DIV> </DIV>
<DIV>Knob

anybody....anybody....</DIV></BODY></HTML>

-----_=_NextPart_001_01BE9268.3F46A150--

Date: Thu, 29 Apr 1999 14:00:14 -0400
From: BEN NOCK <G4BXD@compuserve.com>
Subject: Bits FS
To: Old Tube Radios <boatanchors@theporch.com>
Message-ID: <199904291400_MC2-73F1-C00E@compuserve.com>
MIME-Version: 1.0
Content-Transfer-Encoding: quoted-printable
Content-Type: text/plain; charset=ISO-8859-1
Content-Disposition: inline

Mk 123 set green canvas cases..... 18.00
Mk 123 miniature field voltmeters..... 18.00
Mk 123 Universal mains adaptor..... 8.00

price in Pounds Sterling, post extra.

Ben G4BXD.

From: Norm Flasch <flasch@cushy.ece.nwu.edu>
Message-Id: <199904292207.RAA10206@cushy.ece.nwu.edu>
Subject: Remember teletype?
To: Old Tube Radios <boatanchors@theporch.com>
Date: Thu, 29 Apr 1999 17:07:36 -0500 (CDT)
MIME-Version: 1.0
Content-Type: text/plain; charset=US-ASCII
Content-Transfer-Encoding: 7bit

I was working with a student here expaining the origins of RS-232 and why there are so many variations. I asked him if he knew what a teletype machine is. The answer was no... Well, he has some historical prespective now :-) Remember all the newscasts, even well into the 70's (if my memory is correct) had teletype machines running in the background? How things have changed. Of course, how would a 20 year old know what a teletype machine is? We don't teach technical history here. At least I'm around to fill in the blanks now and then.

--
Norm Flasch Electronic Specialist ECE dept
Northwestern University Evanston, Illinois
flasch@ece.nwu.edu 847-467-4387

>blanks now and then.

>

>--

>Norm Flasch Electronic Specialist ECE dept

>Northwestern University Evanston, Illinois

>flasch@ece.nwu.edu 847-467-4387

>

>

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or call Juno at (800) 654-JUNO [654-5866]

Message-ID: <001401be9299\$51379000\$451e29d8@blah>

From: "Richard Brunner" <rbrunner@gis.net>

To: Old Tube Radios <boatanchors@theporch.com>

Subject: Tunable Hum

Date: Thu, 29 Apr 1999 19:37:12 -0400

MIME-Version: 1.0

Content-Type: text/plain;

charset="iso-8859-1"

Content-Transfer-Encoding: 8bit

It isn't the AVC line, its the antenna! (more or less) See QST, April 1995, pages 35-37, "An HF Interference Mystery Solved!" When RF currents use the ac line as an RF return, they go through the rectifier which chops them up 120 times per minute, and couple capacitively through the power transformer. How do we solve it? Bypass the rectifier elements with 0.01 µfd (suggested) capacitors, put RF chokes in the ac power line, and put a good ground on the chassis. A balanced or coax-fed antenna also helps. I sometimes have this problem with my GRC-9, due to the multitude of non-linear elements in the power supply; rectifiers & solid-state regulators. Its worse around 8 Mcs. (I have to make that power RFC!)

From: "David Newkirk" <dpnewkirk@home.com>

To: Old Tube Radios <boatanchors@theporch.com>

Cc: "'BoatAnchors'" <boatanchors@sco.theporch.com>

Subject: RE: hum on STRONG signals?

Date: Thu, 29 Apr 1999 19:57:49 -0400

Message-ID: <000001be929c\$16525300\$11670518@cc328679-a.vron1.nj.home.com>

MIME-Version: 1.0

Content-Type: text/plain;

charset="iso-8859-1"

Content-Transfer-Encoding: 8bit

A. B. Bonds wrote:

[snip]

> >normal way I'd suspect. It hums only on strong, local stations!

[snip]

> AaaaHAH! CARRIER HUM!! I've tried to talk about this before, but there
> was not much response. Yes, it is most obvious on strong
> stations when the
> AGC is working pretty hard, and yes, it only appears on some sets. In any
> event, it's a common problem (Can you say "Hallicrafters?")

[snip]

> Any takers?

I'll try. See Lyle Russell Williams, KC5KBG, "An HF Hum Interference Mystery Solved," April 1995 QST (I don't know the page numbers; I have on the CD-ROM version of 1995 QSTs). As a quick explanation, the deck for this article reads, "What happens if you connect and disconnect your radio's RF return 120 times each second? Hmm..." What's likely happening is that these hummy radios are depending more than a little on their ac-line connection, made largely through power-transformer capacitance in series with the set's power rectifiers, for RF grounding. (This is exactly why, when we're communicating with "separates" and a TR switch in the manner of days past, our transmitted signals may sound hummy to us in our own receivers: We're hearing quite a bit of signal through our receivers' power transformers, modulated by the switching of the path by our receivers' rectifiers. This is also the mechanism of "tunable hum" in regenerative receivers and oscillator-leakage-related hum in nonregenerative direct-conversion receivers.)

Hum on the the B+, and hum on grids, are alternative, and possibly additional causes. Hum on the agc line, if present, can be made worse if the hum remodulates the received signal in the set's AGC-controlled stages; agc'd stages are, after all, a form of mixer in which the higher-frequency gain-controlled signal is mixed with an extremely low frequency one (the AGC control voltage).

And why, regardless of the mechanism of the modulation, is the hum audible only on strong signals? Because the modulation sidebands added to incoming signals are quite far down, and only very strong signals quiet the receiver enough so you can hear the modulation. Receiver audio response also plays a role in the relative level of the hum, of course.

At base, the cures involve disallowing the passage of RF through a set's

rectifiers; that is, making sure the set has an RF ground that isn't interrupted 120 times per second.

73,

Dave Newkirk, W9VES
dpnewkirk@home.com

From: W4UOC@aol.com
Message-ID: <4c40b1b9.245a4d46@aol.com>
Date: Thu, 29 Apr 1999 20:03:18 EDT
Subject: Re: Remember teletype?
To: Old Tube Radios <boatanchors@theporch.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
Content-Transfer-Encoding: 7bit

My favorite operating mode was 45 baud (60 wpm) rtty with my Viking II (fsk) back in the early 60s. I then got into afsk with single sideband transmitters such as an HW-12 and the unmentionable rice box types.

Well, some interesting news is the recently released (free) PSK31 phase shift mode software, much like rtty with very narrow shift in the range of 30-40 cycle band space. I am using it with my original Collins S-line and on my first contact worked Germany on 20 meters. All you need to demodulate and modulate the tones is rather simple software and a computer with a sound blaster type input and output. Installation is simple.... connect the speaker output of the computer with the microphone input and the headphone jack of the receiver to the mic input of the computer. It is really a no brainer. This way you can use a good stable BA and have a ball with RTTY type qsos. I think you will find you can copy signals you can't even hear with your ear.

Tom Koch - W4UOC
Atlanta, GA.

Message-Id: <199904300147.SAA18818@mail-gw2.pacbell.net>
From: "Arden Allen" <gumbear@pacbell.net>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: mail format
Date: Thu, 29 Apr 1999 18:48:08 -0700
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit

Hi Roger;

> I am being told that my posts are in html format. My mailer
> is set for plain text. I would appreciate receiving direct
> replies from list members to verify html or plain text
> format.

My MS Internet Mail v3 reports your message properties as "Content-Type:
text/plain;"

Message-ID: <372912ED.2FD6F108@vifp.monash.edu.au>
Date: Fri, 30 Apr 1999 12:18:21 +1000
From: Morris Odell <morriso@vifp.monash.edu.au>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
Subject: [Fwd: Remember teletype?]
Content-Type: multipart/mixed; boundary="-----2A2A687C09C5CF5CD512AA98"

This is a multi-part message in MIME format.
-----2A2A687C09C5CF5CD512AA98
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

-----2A2A687C09C5CF5CD512AA98
Content-Type: message/rfc822
Content-Transfer-Encoding: 7bit
Content-Disposition: inline

Message-ID: <372912D3.8659A160@vifp.monash.edu.au>
Date: Fri, 30 Apr 1999 12:17:55 +1000
From: Morris Odell <morriso@vifp.monash.edu.au>
X-Mailer: Mozilla 4.04 [en] (Win95; I)
MIME-Version: 1.0
To: W4UOC@aol.com
Subject: Re: Remember teletype?
References: <4c40b1b9.245a4d46@aol.com>
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Hi all,

W4UOC@aol.com wrote:

> Well, some interesting news is the recently released (free) PSK31 phase
> shift mode software, much like rtty with very narrow shift in the range of
> 30-40 cycle band space.

<snip>

> I think you will find you can copy signals you can't even hear
> with your ear.

Sounds wonderful, but will I still be able to gaze hypnotically into the works of the mechanical teleprinter (Siemens Model 100 in my case) while using it???

: -)

73 de Morris VK4DOC

-----2A2A687C09C5CF5CD512AA98--

Message-Id: <3.0.5.32.19990429214421.009444d0@mail1.telalink.net>

Date: Thu, 29 Apr 1999 21:44:21 -0500

To: Old Tube Radios <boatanchors@theporch.com>

From: Tom Norris <badger@telalink.net>

Subject: RE: hum on STRONG signals?

Mime-Version: 1.0

Content-Type: text/plain; charset="iso-8859-1"

Content-Transfer-Encoding: quoted-printable

AaaaHAH! CARRIER HUM!! I've tried to talk about this before, but there was not much response. Yes, it is most obvious on strong
> stations when the
[snip]

>I'll try. See Lyle Russell Williams, KC5KBG, "An HF Hum Interference=
Mystery
>Solved," April 1995 QST (I don't know the page numbers; I have on the=
CD-ROM
>version of 1995 QSTs). As a quick explanation, the deck for this article
>reads, "What happens if you connect and disconnect your radio=92s RF return
>120 times each second? Hmm..." What's likely happening is that these hummy

[snip]

OK. So now how do you explain it appearing on a PORTABLE radio. Still on stronger signals
mind you. I might assume the problem with the portable-set hum is indeed caused by an
AGC overload.

shrug

Tom KA4RKT

Message-ID: <000101be92b3\$be909420\$55ee490c@SandyBlaize>
From: "Sandy Blaize" <ebjr@worldnet.att.net>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Hallicrafters "logo" needed
Date: Thu, 29 Apr 1999 21:45:28 -0500
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Looking for a Hallicrafters logo disc. The one with the
lower case 'h' in
a circle around 5/8 to 3/4" in diameter. Anybody got one hiding
or
hidden away somewhere? Trying to cover up a blank spot on my
HT-18!
73,
Sandy W5TVW

End of BOATANCHORS Digest 2525
